
SEARCHING FOR THE SOCIAL ENGINE OF THE GREEN GROWTH LOCOMOTIVE: GREEN AS
SOCIAL IN THE NEW GROWTH PARADIGM

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People and their environment. Photo: UNEP, 2003.

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Abstract

The Green Growth paradigm has gained traction as an environmentally sound alternative model of economic growth. It is institutionalized in various forms in the work of the Global Green Growth Institute, the United Nations Environment Programme and the Global Green Growth Initiative. Based on a number of underlying assumptions, largely economic and environmental, it also purports social co-benefits, namely jobs and greater access to resources.

A deconstruction of green growth, this paper is primarily a critical analysis of the social sustainability assumptions of green growth. It examines the extent to which the overall approach and assumptions inherent in the green growth model allow it to adequately address key social sustainability underpinnings of sustainable development e.g. multi-dimensional poverty, inequality and social justice. In so doing, the potential for green growth to deliver in important ways for poor and marginalized individuals is also considered. The false dichotomy that may unintentionally be created between economic efficiency and social equity considerations is investigated in further depth. Employing a social justice lens informed by the existing socio-environmental and socio-ecological literature, explicit and inexplicit synergies, trade-offs and conflicts are explored. A largely theoretical review, it will also be complemented by analysis of one of the more well-known sustainable development public policy responses to-date: biofuels. Advancing a more multidimensional theoretical approach to the longstanding problem of sustainable development i.e. equal priority to and greater equity of benefits across all three dimensions of sustainable development, it argues that a truly transformative green growth approach must consider the "who" as much as the "how many".

The World Centre for Sustainable Development (RIO+)

One of the most important legacies of the RIO+ Conference was the launching, during the High-Level Segment of the Conference, of the "World Centre for Sustainable Development - RIO+". Established on June 24th, 2013, the RIO+ Centre works to reaffirm and make actionable the inextricable link between social, economic and environmental policies for the achievement of sustainable development and human well-being.

INTRODUCTION

Nature has long fuelled the world's growing economy with almost 40% of current global world output directly derived from raw materials and resources¹. Natural resources account for one fifth (20%) of world trade, a critical source of revenue for producing countries who have more than 80% of their exports supplied by nature². Energy production continues to be dominated by fossil fuels, which are responsible for more than 80% of global production, with renewables (other than hydroelectric and nuclear sources) accounting for only 5% (REN21, 2012). Fossil fuels also account for over 80% of energy consumed (IEA, 2013).

Growth, and by extension development, is still indisputably resource and fossil fuel dependent and largely characterized by unsustainable and harmful modes of production that undermine the very resource basis upon which humanity depend. These patterns are at odds with global aspirations and commitments to more sustainable development that date back to the early 1970s going through the 80s, 90s, and 2000s with renewed commitments. The latest of these is expressed in the World We Want Outcome document of the Rio+20 Conference and reinforces that generating the transformation needed for shifting development to one that is equitable, fair and based on sustainable resource use and management will neither be simple nor easy.

The Green Economy and Green Growth paradigm that came into the limelight at the Rio+20 Conference has recently gained traction as an approach that can galvanize the needed

shift away from business-as-usual modes of production by tackling, reversing and/or transforming the way we produce, consume and use energy. Like sustainable development it seeks to demonstrate that more careful environmental management does not need to come at the expense of prosperity and can in fact yield *better* growth³. With its proactive and pragmatic environmental-economic approach, green growth has managed to spawn an enthusiastic new generation of policy actors focusing on research, coalition building and policy reform.

However it has also generated a fair share of "green" skeptics questioning green growth motivations and adequacy in addressing the intersection of social, environmental and economic dimensions of sustainability and the well-recognized urgency of reversing the trends of increasing inequality created through current economic growth models.

This paper seeks to shed light on the main underpinnings of the green growth model in order to provide an introspective on its coherence with social justice and equity considerations found in recent commitments to sustainable development. In so doing, it questions the false dichotomy⁴ that seems to put economic growth and efficiency at odds with inequality reduction. Employing a social justice lens informed by the existing socio-environmental and socio-ecological literature, we explore explicit and inexplicit synergies, trade-offs and conflicts between green growth and equitable development.

In our analysis of green growth we ask four questions:

¹ <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>. Accessed January 28th, 2014.

² Ruta, Michele and Anthony. J Venables (2012). International Trade in World Resources: Practice and Policy. Working Paper. Economic Research and Statistic Division, World Trade Organization, March 2012. Available at <http://www.annualreviews.org/doi/pdf/10.1146/annurev-resource-110811-114526>. Accessed February 25th, 2014.

³ Jacobs, Michael (2012). Green Growth: Economic Theory and Political Discourse, Centre for Climate Change Economics and Policy Working Paper No. 108/Grantham Research Institute on Climate Change and the Environment Working Paper No. 92, October 2012.

⁴ <http://www.unrisd.org/80256B3C005BE6B5/%28http-News%29/53606172B73726C7C12579B90059D895?OpenDocument>

- To what extent does the discourse and policy lines/pillars of the Green Growth paradigm (energy, jobs, technology) provide an alternative to the traditional economic model? (which has tended to result in a co-location of resource wealth and poverty and deeply unbalanced access to and use of resources away from the poor and marginalized?)
- What are some of the key social assumptions that underlie green growth and the intended positive contributions to a more sustainable, healthy and equitable model of development?
- When applied to real time-issues such as food/bio-fuels and water/energy what issues emerge for the GG paradigm? What theoretical synergies, tradeoffs and conflicts become apparent?
- What implications does this have for intended triple-win approaches of sustainable development?

The first three sections of the paper explore the first three questions in sequence and in the last section, Section IV, the summary answers from our exploration are presented including how they shape the answers to the fourth and last question. We argue that the current approach to green growth is heavily focused on traditional economic growth models and despite its added novelty of keeping this growth within the limits of the environment, in practice it represents only a partial shift away from "business as usual" development.

I. Green growth as an alternative economic model

Simply stated, green growth is economic growth (in terms of gross domestic product or GDP) that also achieves significant

environmental protection.⁵ While this concept had been barely heard of before 2008, it now features prominently in the discourses of various international development institutions. The World Bank together with five other multilateral development banks have committed to achieving green growth, the OECD has adopted a green growth strategy, a new international organization –the Global Green Growth Institute (GGGI) - has been created to support national green growth efforts, the United Nations Environment Programme (UNEP) adopting the label "green economy" published one of the more referenced reports on the topic, including substantive sectoral analysis and scenarios for achieving this goal.

Furthermore, networks such as the Green Growth Knowledge Platform are enhancing access to research and knowledge while coalitions such as the Green Economy Coalition are providing important critical and cautious voices. In addition, at the G20 Summits in France and Mexico (2011 and 2012) some of the largest economies in the world, supported by the World Bank and GGGI, committed themselves to green growth. Incipient state-to-state activism is also now evident in the leadership of Mexico and South Korea in promoting green growth.

But what exactly is being promoted? What does it mean for our economies, for our people and of course for nature and its ecological balances? Understanding the narratives and discourses that frame green growth is helpful since it reflects how issues are thought of and what pathways are adopted to deal with them. Embedded in this framing is the fundamental yet often neglected role that stakeholder interests, politics and power have in influencing the policies and practices of any given paradigm⁶.

⁵ Jacobs, Michael (2012). See Footnote 3 for full reference.

⁶ Bar et. al (2011). Green Economy Discourses in the Run-up to Rio 2012, Environmental Policy Research Centre, FreieUni-

The green growth wave encompasses various concepts some focusing almost exclusively on carbon emissions (e.g. low-carbon and low-emission development) and others like green economy attempting to expand the economic basis of the paradigm to include social dimensions. While the breadth of their objectives vary, they share the fundamental and common goal of continuing the pursuit of economic growth, which in turn shapes their discourse, strategies and methods. Fuelled by the imperative of profit making and tempered by the concern over environmental thresholds, the green growth model places technology and innovation at the centre of its efforts looking to clean technologies as a promising, and economically profitable, solution to unsustainable development. Market-based instruments, new and old, and the existing structures and motivations of the current economic paradigm provide the frame within which green growth proposes to operate and as greening the economy is often viewed as a tool for stimulating continued economic growth.

Interestingly, the original case for green growth emerged independently from UN processes related to sustainable development and was also looked to by some countries, as a short-term response to stimulate the economy – by investing in the green sector and stimulating employment growth. South Korea for example has been at the forefront of these actions having adopted a Green Growth Strategy in 2009 with initial investments aimed at boosting the economy⁷. In the wake of the 2008-2010 global economic crisis, South Korea allocated almost 80% of its fiscal stimulus package to green programmes. Overall, around 16% of fiscal spending during the global recession was directed towards investment in green measures (\$110 billion in

the US) and although this represented only a portion of bulk allocations, it indicated the economic motivations and aspirations of the initial emergence of green growth measures.⁸

Beyond this short-term measure of green investment the more widespread case for greening growth put forth by several organizations is also rooted in classic economic thought through the basic principle of market failure – the failure of accounting for the full value of the activities that take place within markets. In the green growth framing, the productive value of the environment, in its provision of resources, absorption of wastes and supply of environmental services, should also be considered a factor of production and properly accounted for at least on an economic basis⁹. Placing economic values on so called ecosystem services (e.g. benefits arising from ecological functions such as the provision of clean water, biodiversity, timber etc.) has stirred criticism for its implied commoditization and indeed privatization of nature by making it marketable¹⁰. An examination of the environmental burden created by some economic activities as compared to others and a better understanding of their short, medium and long-term benefits as well as costs is also a concern of green growth proponents. Until recently, these costs have either been hidden or uncalculated with one set of calculations by UNEP suggesting these costs running into the billions for 2008 alone¹¹ (UNEP, 2010).

versitat Berlin. Accessed February 15th, 2014.

⁷ <http://www.greengrowth.go.kr/wp-content/themes/newspro2891/images/files/down02.zip> and <http://unfccc.int/resource/docs/natc/kornc3.pdf>

⁸ Barbier, Edward (2010). Toward a Global Green Recovery: The G20 and the Asia-Pacific Region. Available at http://japan-focus.org/-Edward_B.-Barbier/3383. Accessed February 25th, 2014.

⁹ Jacobs, Michael (2012). See Footnote 3 for full reference.

¹⁰ Unmuessig, Barbara (2010). The Green Economy – The New Magic Bullet?. Heinrich Boll Stiftung, Washington, D.C, USA. Accessed from http://lb.boell.org/sites/default/files/unmuessig_green_economy_magic_bullet.pdf on May 2nd, 2014.

¹¹ UNEP FI (2010). Universal Ownership Why environmental externalities matter to institutional investors. Accessed from http://www.unepfi.org/fileadmin/documents/universal_ownership.pdf on February 7th, 2014.

This principle combined with the deep recognition that current rates of resource exploitation and misuse are unsustainable and damaging to people and planet (and economies of course) has fuelled a wide array of suggested policies, tools and measures aimed at shifting practices to account for these environmental values and impacts. While the merits of these green shifts and policies are undeniable, they become questionable regarding their ability to deliver a more comprehensive form of sustainable development given the weak attention given to issues of widespread poverty and inequality.

How for example would payment for ecosystem services affect poor and excluded groups whose livelihoods are directly linked to nature? As discussed later in the paper, detail on issues of equity, redistribution, human rights (including right to water, right to food) among others are not explicitly mentioned or planned for in green growth literature. This is particularly so for rights and the potential conflict that may arise through assertions of rights for development vs other social and economic rights.

In an attempt to account for social sustainability within green growth, the UNEP Green Economy Initiative (GEI) adopted the following green economy definition: “one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low-carbon, resource efficient and socially inclusive”. It is also an approach that is supposed to be proactive and anticipatory rather than regressive and reactionary. This widely used definition implies equal attention to the economy, the society and the environment. More recently, the concept has been expanded to include inclusive green growth which has been defined as growth that not only helps green economies, but also helps move towards sustainable development by ensuring environmental

sustainability contributes to, or at least does not come at the expense of, social progress.

While UNEP’s definition is a welcome step forward, taking a close look at their Green Economy Report – the first outcome of the GEI – it is clear that the green versus brown economy distinction is reduced to a simple choice of investment and technology. Its greening strategies are framed in terms of capital, prices, cost-benefit analysis, profits and markets with ecosystems treated as marketable goods. While the virtue of pushing countries and industries to adopt urgent environmental reforms through green growth mechanisms is undeniable, the key flaw – at least from a social standpoint – is that it treats capital (in this case, natural capital) and not people or environment as “king”.¹² In fact UNEP asserts that “achieving sustainability depends almost entirely on getting the economy right”. However without a well-defined strategy for ensuring green growth measures translate into improvements in the lives and livelihoods of poor and marginalized people as they themselves see it, getting the economy right may also mean getting development wrong.

II. Where is the social engine of green growth?

Green growth purports to create social co-benefits, namely jobs and greater access to resources/services such as energy. This potential serves as a political driver for significant policy reforms at the national level and has also been, for select countries, a partial catalyst for economic renewal (Burkolter and Perch, forthcoming)¹³. However while jobs are often trumped as the significant social benefit of green growth, no clear strategies appear in country reports on how green jobs will be accessed by socially excluded groups

¹² IBON (2011). Green Economy: Pain or Gain for the Earth’s Poor. Available at http://iboninternational.org/resources/policy_briefs/114. Accessed February 25th, 2014.

¹³ Burkolter, Pablo and Leisa Perch (forthcoming). Greening Growth in the South: Practices, Policies and New Frontiers.

and people living in poverty. In addition, while highly qualified workers may be essential for the transition towards a green economy the creation of green jobs will be constrained by skill gaps¹⁴ and may well result in the creation of a green elite that replicates the same labour-management flaws of current markets.

While policies and programmes need to better match skills, enhance training and think of solutions for shrinking sectors, issues related to wages, gender parity, bargaining power and health risks of suboptimal working environments all need to be addressed as well.¹⁵ It is not just a numbers game but time to think about quality jobs and the potential negative impact of green job transitions. Risks to employment in existing sectors for example could potentially outweigh the benefits of green job creation. One example from Galagoczi (2011) highlights that out of 12 million European car manufacturer employees, only 250,000 could be termed green¹⁶. If an industry like this one turned green what would happen to the various jobs, mainly unskilled and low-wage, that would be lost?

Our review of the global institutional green growth approaches as well as national green growth reviews and analyses suggests that social equity considerations are falling some way down the line. While the focus on the economic-environment pillar of sustainable development is a welcome advance, it still falls short of a triple-win approach:

- **What country reports say:** The cloud analysis of the Green Economy Summary documents of nine (9) developing countries reveals that the words “green”, “economy”, “energy”,

“development” and “growth” were more commonly used than climate and poverty (Knickel et al, 2013¹⁷);

- **Who leads and sets the discourse at the global level:** Of the organizations leading multiple activities and platforms, many are either environmental or economic in nature i.e. UNEP, the World Bank and other multilateral development banks, the Renewable Energy and Energy Efficiency Partnership (REEEP), the Global Green Growth Institute, the Renewable Energy Policy Network for the 21st Century (REN21) and the UN Framework Convention on Climate Change (UNFCCC). Only a handful have a substantive social development agenda and portfolio of programmes i.e. the United Nations Development Programme (UNDP) and the Food and Agricultural Organization of the United Nations (FAO). Programmes defined in Figure 1 are also largely economic-environmental in focus;
- **Where investment is focused:** China’s investment alone in renewable energy exceeds the GDP of many small country economies (Khoday and Perch, 2012¹⁸) and by 2011, China represented one-fifth of total global investment in renewable energy (UNEP SEFI, 2012¹⁹). Despite this, China’s environmentally-related

¹⁴ See footnote 6.

¹⁵ UNEP (2012). Country Report on Morocco. Accessed from http://www.unep.org/greeneconomy/Portals/88/documents/advisory_services/countries/Morocco%20final.pdf on February 7th, 2014.

¹⁶ See footnote 6.

¹⁷ KNICKEL, Karlheinz et al (2013). One world --- one climate policy? Paper presented at Workshop on ‘Multi-disciplinary perspectives on climate ethics’, Lake Como, Italy, 2013.

¹⁸ Khoday, Kishan and Leisa Perch (2012). China and the World: South-South Cooperation for Inclusive Green Growth, Brasilia, 2012. Available at <http://www.ipc-undp.org/pub/IPCWorkingPaper95.pdf>.

¹⁹ UNEP SEFI (2012). Global Trends in Renewable Energy Investment 2012. UNEP Sustainable Energy Finance Initiative (SEFI) and Bloomberg New Energy Finance, Paris. Accessed February 7th, 2014.

health woes continue and worsen²⁰ which questions the potential positive impact of green growth patterns on citizens' health and well-being.

- **Which sectors are being promoted:** Of the 10 key productive areas targeted for the green economy (UNEP 2011), only four weigh heavily towards rural-centered growth which would provide more direct opportunities for the more than one billion rural poor .e.g. agriculture, water, forestry and fisheries. Only forestry and water has seen any investment momentum in the last few years and mainly through environmental proxies i.e. through REDD and REDD+ and hydropower respectively which have themselves raised a number of social and justice concerns;
- **Key elements proposed for transition:** UNCTAD's²¹ four key elements for LDCs in a successful transition to a green economy²² are also largely economic in nature, focusing on funding, enabling environments for private investment in markets, maximizing trade opportunities and designing mechanisms for technology transfer.
- **Mindsets:** One example that illustrates how countries feel green growth can address their development is found in the following explanation justifying

the rapid expanse in hydropower investments: "Hydro-electric stations are ecologically and economically beneficial and contribute to sustainable development and the reduction of poverty, which explain why developing and underdeveloped countries have become attracted to this type of energy"²³.

- **Where practical guidance is pointed:** A collaborative toolkit, coordinated by UNDP and with the participation of AfDB, OECD, UN and the World Bank²⁴ on inclusive green growth begins its discussion on inclusive green growth by stating "Much of green growth is about good policies—addressing market failure and "getting the price right" by introducing environmental taxation, pricing the use of scarce natural resources and pollution (such as carbon pricing), defining and enforcing property rights, and reforming inefficient subsidies. Integrated policy approaches to growth are critical for enabling the private sector to undertake needed investments and innovations and for getting both consumers and businesses to internalize the true costs of their behavior."

But our critique is not only about green growth's overemphasis on economics, but about the lack of innovative economic approaches that would allow humanity to coexist in a "safe and

²⁰ Dizikes, Peter (2013). Study estimates extent to which air pollution in China shortens human lives. Accessed from <http://phys.org/news/2013-07-extent-air-pollution-china-shortens.html> on February 7th, 2014.

²¹ Dickey Zakaib, Gwyneth. (2011). Smart-REDD plan targets causes of deforestation. Accessed from <http://www.nature.com/news/2011/110529/full/news.2011.331.html> on May-15th, 2014.

²² UNEP, UNCTAD and UNOHRLLS (2011). Why a Green Economy Matters for Least Developed Countries. Available from http://unctad.org/en/docs/unep_unctad_un-ohrlls_en.pdf.

²³ Mongolian Economy (2011). Hydro Power Station Can Put an End to Energy Imports. Accessed from <http://mongolianeconomy.mn/en/p/1377> on May 2nd, 2014. Mongolia's Economy and Business Magazine Online Edition.

²⁴ AfDB, the OECD, UN and World Bank (2012). A Toolkit of Policy Options to Support Inclusive Green Growth. Submission to the G20 Development Working Group. Accessed from <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/A%20Toolkit%20of%20Policy%20Options%20to%20Support%20Inclusive%20Green%20Growth.pdf> on February 7th, 2014.

just space”²⁵, that guarantees social rights and livelihoods while respecting nature’s balance. In practical terms this means ensuring that all people have access to quality resources – such as food, water, health care and energy – so they can fulfill their basic human rights while at the same time ensuring that our use of natural resources does not overburden the environment and cause harmful trends such as climate change and water scarcity amongst others.²⁶ This approach, in contrast to mainstream green growth, places social justice and ecological balance as top priorities and would search for innovative economic tools that could make it a reality. While economic growth has been the main driver behind poverty reduction over the past two decades, the quality of this growth and how it affects the well-being of poor and excluded groups has been mixed; at times negative or even neutral.

If we look for a moment at social sectors such as health and sanitation, wouldn’t green growth – based on its UNEP definition of creating social equity – start to account for hidden costs or inequities for example when mineral wealth is co-located with poverty (DR Congo or the Limpopo province in South Africa are examples of this phenomenon) or when rampant mineral extraction creates high capital costs to public health over decades (evidenced in gold or asbestos mining in South Africa or aluminum mining in Zambia)? It should. The resulting health costs of respiratory illnesses due to pollution creates a significant economic burden on many economies – mostly developing (UNEP, 2010; WHO, 2013²⁷).

Some of the world’s most toxic sites are also located in countries where inequality is significantly high e.g. Namibia and Nigeria. At the macro-scale, this has resulted in a core/periphery model of wealth and poverty wherein the wealthy live in proximity to infrastructure, industry, distribution networks and the halls of power while the periphery is largely occupied by those who work for the wealthy, build the infrastructure, provide the foundation of the industrial labour force, man the distribution networks and have the least access and influence within the halls of power (Khoday and Perch, 2011²⁸; MacLennan and Perch, 2012). This is expressed eloquently in the following statement from a post-2015 consultation in Turkmenistan where one participant noted “*I want more new schools, multi-storey buildings, stadiums and kindergartens to be built, not only in the capital city, but in all parts of our country.*”²⁹

Sanitation is also worryingly absent from green economy efforts. Though estimates of the cost to create minimum access worldwide (265 billion annually³⁰) equal the current estimated investments in green growth, few countries seem to have prioritized it. This begs a question on priorities. In Morocco where a link has been made, the summary document still speaks more in terms of the numbers of jobs created over x number of years (stating for example that the National Programme of Household Waste is expected to provide for the creation of 11 000 jobs over 15 years) as compared to the quality of change that will be

²⁵ Raworth, Kate (2012). A Safe and Just Space for Humanity - Can We Live Within the Doughnut. Oxfam Discussion Papers. Oxfam International, February 2012. Accessed from <http://www.oxfam.org/sites/www.oxfam.org/files/dp-a-safe-and-just-space-for-humanity-130212-en.pdf> on February 15th, 2014.

²⁶ ibid

²⁷ The World Health Organization (2013). Public Health and the Environment. Available at: <http://www.who.int/gho/phe/en>. Accessed January 27th, 2014.

²⁸ <http://www.ipc-undp.org/pub/IPCWorkingPaper91.pdf>. Accessed January 27th, 2014.

²⁹ The UN launched a broad based consultation process to help reflect on the MDGs and determine priorities for a post 2015 development framework. This post-2015 consultation process has involved over 1.6 million people in 88 national dialogues, 11 thematic consultations, regional discussion fora, via a web platform (www.worldwewant2015.org) and global survey (www.myworld2015.org).

³⁰ See <http://www.wsp.org/content/economic-impacts-sanitation> for more information. Accessed January 27th, 2014.

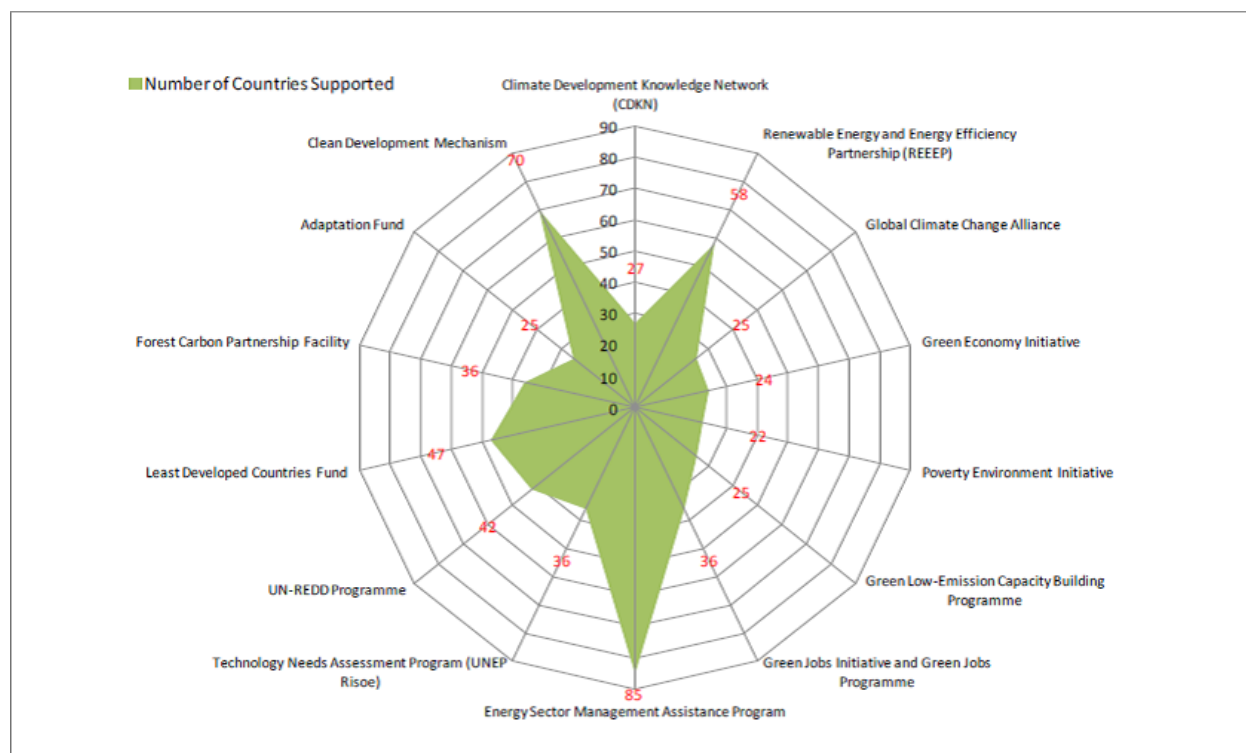


Figure 1. Green Economy Initiatives Supporting Greater than 20 Developing Countries (number of countries supported). Sourced from UNDESA 2013

achieved. It is also not clear how much the rate of job creation will narrow the current jobs and income gap faced by Morocco.

This seeming gap between intent and application suggests that green growth may be hard pressed to provide real solutions to a number of pressing human development problems facing developing and developed countries alike. Notwithstanding these reservations regarding social benefits, the green growth locomotive shows little signs of slowing. UNDESA (2013) estimates that at least USD 285.7 billion is allocated to green growth across a diverse set of funds and that more than 160 programme countries participate in activities (see Figure 1).

It would be reasonable to expect that, at a minimum, where green growth could potentially create more social benefits (technology, jobs and energy), that this investment translate into direct and concrete benefits for excluded groups and the poor more generally. However

when we look at energy as the main driver of the first generation of green growth interventions, there is little detail on how the energy poverty gap will be addressed since traditionally, more energy capacity has not resulted in a significant narrowing of the energy poverty gap (estimates suggest that 1.3 billion still have no access to electricity³¹). Equally, low-carbon energy pathways have not eliminated huge gaps in energy access between urban and rural populations; in Southern Africa, while the fossil fuel burden in energy production is relatively low or has been reduced, energy inequality between rural and urban remains significant (EIA, 2012³²).

³¹ World Bank (2012). Inclusive Green Growth: The Pathway to Sustainable Development. The World Bank Group, Washington DC. Accessed from http://siteresources.worldbank.org/EXTSDNET/Resources/Inclusive_Green_Growth_May_2012.pdf on February 7th, 2014.

³² IEA (2012). World Energy Outlook 2012. Accessed February 7th, 2014.

The following section provides a brief overview of the equity challenge to shed light on how it is supposedly being addressed by green growth.

III. Social Assumptions or Social Policy? Where does current Green Growth Policy lie?

There is a perceived vulnerability in development gains which have been generated by the traditional macro-economic model (Ortiz and Cummins, 2011; Deacon, 2010³³; Ravallion 2009³⁴). It is now clear that our current growth model has generated unprecedented levels of income and wealth inequality with almost half of the world's wealth now owned by just one percent of the population. The bottom half of the world's population owns less than the richest 85 individual people in the world³⁵. Inequality is seen to be the second greatest worldwide risk (World Economic Forum released their 'Outlook on the Global Agenda 2014' in which global elites ranked income disparities as a major risk). In addition to extreme levels of income and wealth inequality research also shows that in all countries both rich and poor certain people and groups of people are systematically left out of their countries progress. This social exclusion is not only the result of income-based inequality, but also the product of a variety of intersecting inequalities namely:

- **Cultural devaluation: discrimination and devaluation on the basis of**

socially ascribed identities such as race, ethnicity, religion and gender;

- **Economic inequalities: disadvantages in the distribution of valued resources and opportunities;**
- **Location/spatial inequalities: excluded groups are often located in places that make them hard to reach or easy to ignore and where they rely on nature for subsistence;**
- **Denial of voice: lack of influence in decisions that affect their lives and their communities.**

The interactions between these inequalities helps to explain their persistence over time and therefore piecemeal and lopsided efforts to dissolve them have shown little result.³⁶ This inequality is also reflected in the access and use of resources by socially excluded groups and the poor more generally. For example, one of the main sources of environmental pressures comes from the excessive consumption of the richest 10%³⁷.

Poverty reduction efforts alone have often failed to effectively tackle inequality in all its forms. The challenge for green growth is to avoid such pitfalls and to plan for equity outcomes based on a deeper understanding of equality, how it occurs and is perpetuated. However such a pro-active approach is undermined by some observed assumptions found in the green growth paradigm.

These include: (i) the successful decoupling

³³ Deacon, Bob (2010). From the Global Politics of Poverty Alleviation to the Global Politics of Welfare State Rebuilding. Comparative Research Programme on Poverty Policy Brief. June 2010. Accessed from <http://www.crop.org/viewfile.aspx?id=210> on July 3rd, 2011.

³⁴ Ravallion, Martin (2009). "The Developing World's Bulging (but Vulnerable) Middle Class." Policy Research Working Paper 4816. Washington, D.C.: World Bank. Accessed on July 3rd, 2011.

³⁵ Oxfam (2014). Working for the Few - Political Capture and Economic Inequality. Oxfam Briefing Paper. Accessed from <http://www.oxfam.org/sites/www.oxfam.org/files/bp-working-for-few-political-capture-economic-inequality-200114-en.pdf> on February 15th, 2014.

³⁶ Kabeer, Naila (2010). Can the MDGs provide a pathway to social justice: the challenge of intersecting inequalities. MDG Achievement Fund & Institute for Development Studies, 2010. Accessed from <http://www.ids.ac.uk/files/dmfile/MDGreport-websitesu2WC.pdf> on February 7th, 2014.

³⁷ Raworth, Kate (2012). Who is putting pressure on the planet. Oxfam UK. Accessed from <http://www.kateraworth.com/videos/> on February 28th, 2014.

of economic growth from environmental degradation will rely more on government and private sector than households. While this statement holds a reasonable dose of truth, it disregards the role of excessive consumption by the wealthy and increasingly the aspiring middle class, which puts great pressure on natural resources and often diverts productive land away from the poor in the interest of the few. It also glazes over issues of redistribution of economic and ecological space; (ii) that economic incentives and structures can be both effective and efficient in facilitating this decoupling in order to turn the tide in a "green direction".

Reservations about using market-based measures to account for the economic value of nature stirs fears that pricing and trading schemes could translate into the rich –both in terms of industries and households – buying their way to "greenness"; and (iii) that changes proposed through green growth – jobs, technology and energy - can deliver both poverty reduction and equity at the same time. In addition, there is also an implied assumption that finance earned from better pricing and increased economic growth through greening would be applied in ways that would eliminate or reduce social equity.

By way of example, some of the key social areas that have not received adequate attention by green growth proposals include food insecurity (access to food is a critical ingredient for nutrition, health, education and productivity); access and affordability of energy and supporting infrastructure (about 2.4 billion people, a little more than 1 in every 3 persons, still rely on biomass for fuel posing a number of complex challenges in achieving the poverty goals)^{38,39}; availability and quality

of shelter (a notable proportion of the global urban population does not have access to adequate sanitation -2.6 billion according to Action Aid, 2009- and an increasing number of persons live in urban slums -61% in Sub-Saharan Africa; 13.3% in North Africa and 23.5% in Latin America and the Caribbean⁴⁰ making them vulnerable to recurrent natural disasters such as landslides and floods amongst others); equitable and affordable healthcare and decent employment.

In OECD, 2013 (p.7)⁴¹ **five** key assumptions are outlined related to green growth and the social sector. Two examples are: "Sustainable certification schemes and ecolabelling programmes can become a new source of income in many developing countries with abundant forests and agricultural production. But the benefits to the poor will be greatest if land tenure is secured, and the certification schemes give special premium to community managed forests or small landholders" and Removing fossil fuel subsidies can improve the living conditions of the poorest if some of the money is reallocated to providing cheaper public transport or more accessible health care services". Few green growth assessments contain detailed policy approaches to tackle either of these qualitative adjustments needed in the "how".

While the five (5) main social and equity assumptions outlined by the OECD (two referred to above) identify a number of important synergies, other synergies and

un-energy.org/sites/default/files/share/une/un-enrg_paper.pdf on July 3rd, 2011.

⁴⁰ UN Habitat (2011). State of the World's Cities Report 2010/11. Accessed from <http://mirror.unhabitat.org/pmss/listItemDetails.aspx?publicationID=2917> on May 15th, 2012.

⁴¹ OECD (2013). Putting Green Growth at the Heart of Development: Summary for Policymakers. Paris, France. Accessed from http://www.oecd.org/development/environment-development/Putting%20Green%20Growth%20at%20the%20Heart%20of%20Development_Summary%20For%20Policymakers.pdf on January 28th, 2014.

³⁸ <http://www.conversationsforabetterworld.com/2009/11/engaging-women-in-effective-climate-change-responses/>. Accessed on July 3rd, 2011.

³⁹ UN-Energy (2005). The Energy Challenge for Achieving the Millennium Development Goals. Accessed from <http://www.unenergy.org>

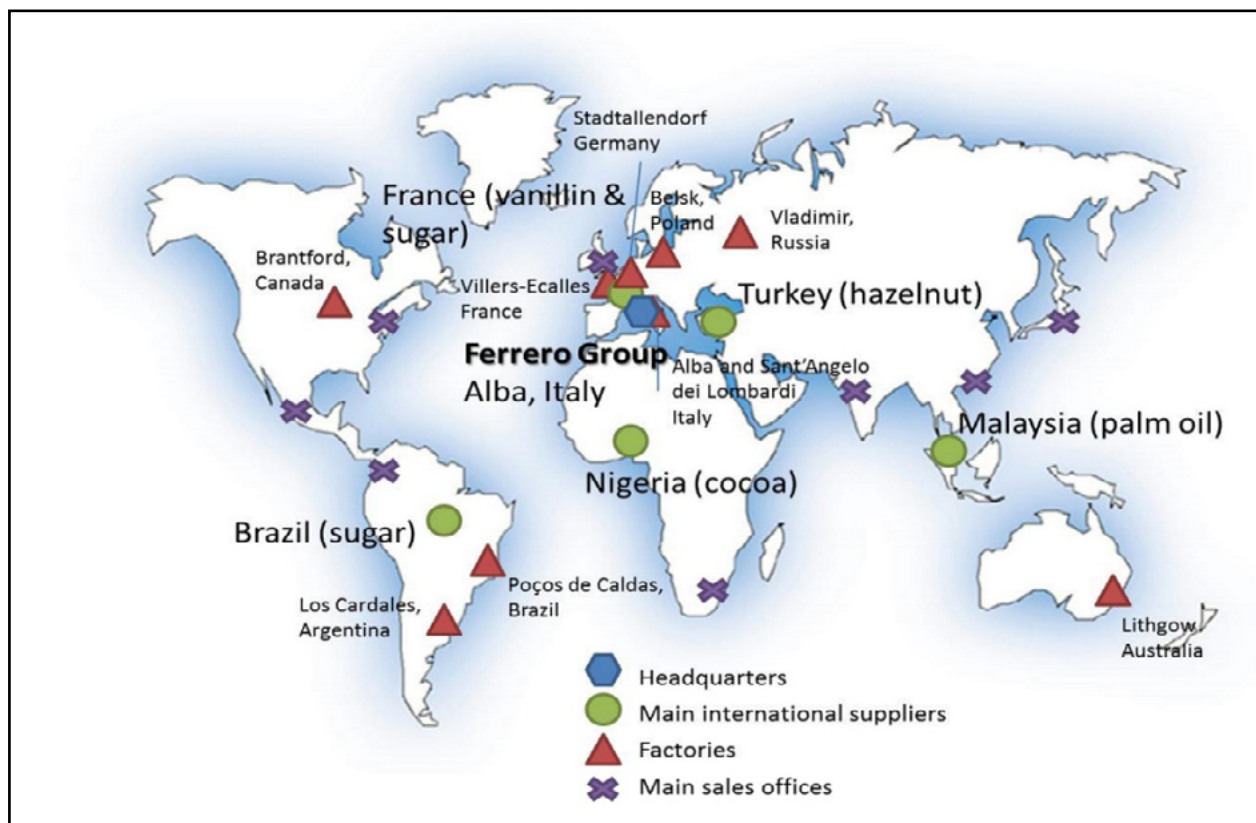


Figure 2. Nutella Value-Chain, sourced from <http://www.washingtonpost.com/blogs/worldviews/wp/2014/01/13/40-more-maps-that-explain-the-world/?hpid=z8> from OECD. Data sourced from Ferrero, Sourcemap and online sources

co-benefits are also deserving of attention. One of these is that access to resources must go hand-in-hand with access to services. High inequality continues to have high social and health costs, particularly for developing countries and weak access to quality health care means that the poor end up suffering more from these. Wilkinson and Picketts (2011) suggest that inequality is spawning a number of inter-linked and chronic social and health costs which may be responsible for current fiscal deficits in the US.

Some lessons emerging from recent experiences in eliminating fossil-fuel subsidies in developing countries shed light on how green social assumptions can result in policy failure. Mexico, where one of the main thrusts has been to reform motor fuel consumption⁴² and to

eliminate subsidies representing an average of 1.5% of annual GDP from 2005 to 2009 (OECD, 2011), is an informative case. Since 2009 this has taken the form of small and cumulative price increases every month to adjust retail prices to reflect international values and better target energy subsidies to poor households. To mitigate potential social costs of the transition on low-income households, the Mexican government has linked reforms with other instruments including the strengthening of social safety nets by providing direct cash transfers for energy consumption to beneficiaries of the conditional cash transfer (CCT) programme *Oportunidades*; facilitating greater use of public transport; and investing on better infrastructure and more efficient vehicles (SHCP, 2011).

⁴² Yet, no measures have been taken to also remove subsi-

dies in the electricity sector.

Burkolter and Perch (forthcoming) note the findings of a recent study by Reyes Tépac (2012) that suggest unintended consequences from a lack of attention to social issues. One is that price increases resulting from the removal of fuel subsidies have led consumers to increase their consumption of inferior fuel ("Magna") that is cheaper but contains more sulphur than the premium alternative, potentially creating a number of health problems if this expands which in turn could be burdensome on the public health budget. Beyond premature deaths⁴³, the disease burden from exposure to sulphur is well documented⁴⁴ and very costly. Another is a negative social reaction to such reforms. Policy reversals have occurred due to widespread protests in Bolivia in 2010, Cameroon in 2008 and Nigeria in 2012 (IMF, 2013)⁴⁵.

In the context of REDD and REDD+, one "green" mechanism to manage forest resources, such social responses have taken the shape of social safeguards and public consultation. Recognizing that dilemmas between poverty reduction and survival (individual interests) vs. conservation and carbon-offsetting (public goods) will emerge, demands have been made to ensure that REDD and REDD+ proactively address these considerations.

Moreover, there is the burden of adapting policies and ensuring their coherence should not only involve the private sector and/or governments as a macro-policy institution. Social policy and the social sector must also be at the table as a pro-active partner in green growth discussions. Social protection initiatives have been successfully adapted to environmental goals in Ethiopia as well as

South Africa (Perch, 2010 and LieuwKie-Song et al, 2009⁴⁶). The Government of Brazil's launch of the Bolsa Verde programme is potentially a new generation of hybrid social-environmental policies and programmes. Valid concerns still remain however over the ability of such programmes to effectively blend green goals with goals to eliminate the more structural forms of inequality such as gender.

At the global level, greening initiatives in an interconnected global economy will also merit attention since it is quite possible and likely that the drivers of growth in one country could potentially conflict or be incompatible with drivers of growth in another, or that the greening of a value chain will involve a complex web of actions – not excluding governance norms - across many countries. Take the case of the Nutella value chain (see Figure 2).

It is truly global, involving multiple countries, legal jurisdictions, multiple languages and national as well as regional frameworks. Greening this value-chain would require a coordinated approach on a large scale including mechanisms for ensuring that equity principles would apply in all jurisdictions. The compatibility of goals is already an issue emerging in South-South cooperation debates particularly on China, India and Brazil's impact and influence on African growth.

This analysis of the discourse, assumptions and proposed methods of the green growth paradigm illustrates that its approach fails to enable a comprehensive and coherent agenda of social justice and well-being for all, particularly of those who have consistently been left out of development advances. The social agenda of green growth seems to be reduced to an old-school form of trickle-down

⁴³ See footnote 41.

⁴⁴ Global Health Observatory Data. World Health Organization. Accessed from <http://www.who.int/gho/phe/en> on January 27th, 2014.

⁴⁵ IMF (2013). Energy Subsidy Reform: Lessons and Implications. Accessed from <http://www.imf.org/external/np/pp/eng/2013/012813.pdf> on January 27th, 2014.

⁴⁶ Lieuw-Kie-Song (2009). Green jobs for the poor: A public employment approach. United Nations Development Program, Poverty Reduction Discussion Paper, New York: UNDP. Accessed from http://mdgpolicy.net.undg.org/ext/economic_crisis/PG-2009-002-discussion-paper-green-jobs.pdf on January 28th, 2014.

poverty alleviation that sidelines the more difficult questions of redistribution, equity and justice both within and between countries. It also neglects key issues of access to natural resources and redress from social exclusion and discrimination⁴⁷.

A good starting point in bridging this gap would be to move beyond rhetoric on the social equity knock-on effects of green growth in order to detail a vision and strategy of how

as saying "Sustainable energy can revitalize our economies, strengthen social equity, and catalyze a clean energy revolution that benefits all humanity. Acting together, we can open new horizons today and help power a brighter tomorrow." None of these actions come without trade-offs and potential conflicts. While obvious synergies exist, the conflict arising from the multiple and often incompatible demands on resources i.e. food vs fuel and

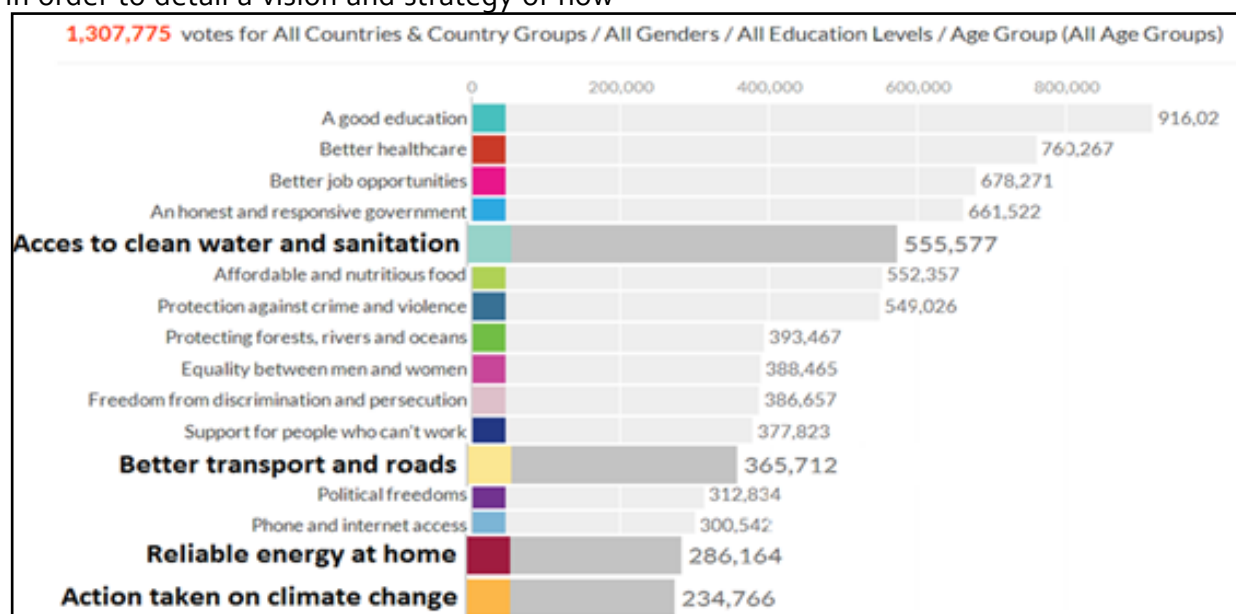


Figure 3. My World Survey Results as of December 2013. Source: People's Voices Issues Brief, January 2014.

their approach and methodology intends to deliver on social sustainability. The following section use the example of biofuels to illustrate some of the inherent synergies, conflicts and trade-offs that can occur in the current approach. Biofuels provides an excellent lens as it has emerged as a main thrust for reducing fossil fuel dependency while creating job and income opportunities for poor and marginalized groups, particularly small-holder farmers.

IV. Social Engine Failures as seen through biofuels

Secretary General, Ban Ki-Moon is quoted

water for drinking vs. water for energy need to be addressed more directly. The challenge arises, in part, due to a conflict between designating food and water as social and political rights and their treatment in a growth oriented economy as private goods, often with calculated market prices. This concern is not an academic one, it is one that people confront on a regular basis and is shared by an active global citizenry as indicated from the findings of the My World Survey under taken in 2013.

Demands for water go beyond water for energy and water for other uses; water for agriculture is also a significant concern and one that has implications for solving food insecurity woes long-term. As Figures 3 and 4 indicate, there

⁴⁷ See footnote 12.

energy and consequently the water demands created by various forms of production. Current and past patterns raise significant questions about green growth as either an enabler of environmental change or a reinforcing force of social inequalities. Insights from bio-fuel expansion help to clarify the dilemmas that face policy-makers and decision-makers, particularly in the developing South, as to how far green and social goals come into possible conflict. Biofuel is a useful reference point as it brings clearly into focus the three principal



Bio-fuels are an increasingly significant part of the package of energy solutions to advance a low-carbon model of development as well as new market opportunities for rural

small farmers. There are two elements to the bio-fuel model – one type which responds to the substitution for biomass fuel sources and a second, more modern, which responds to the need for job creation. Largely, bio-fuels have assumed a prominent place primarily because of its socio-environmental potential as well as the ease of transitioning to this form of energy within existing energy systems.

Both global poverty and global energy poverty are largely rural phenomena across the Global South. Africa, in particular, is seen as a region with much to gain from the expansion of

Table 1. Assessment of Synergies, Tradeoffs and Conflicts in Biofuel Production

Country	Model/Approach	Synergies	Tradeoffs	Conflicts	On Balance
Brazil	Sugarcane-ethanol production, coming, mostly from large estates	"Hundreds of thousands of jobs created;" Public-private sector partner and engagement with agro-industry for public goods	"More blended fuels available in the transport sector; Smallholder moved from mixed-farming to mono-cropping; People leave the agricultural sector"	"No transformative element; Employed can work in dangerous and degrading conditions; Land tends to consolidate in a few hands;" Rapid expansion of sugarcane by over smallholders and indigenous peoples' lands (for example, the Guarani-Kaiowá in Mato Grosso do Sul state) has added new social problems	Mixed: Environmentally Positive/ Socially Negative
	Biodiesel - social labelling initiative which offers an incentive for biodiesel industries to incorporate smallholders in the production chain	Structures the supply chain of biodiesel in Brazil and expands the "sources for the production; Linked to a regulation that demands biodiesel/ diesel blending into gasoline (of at least 5 per cent);" "Directly integrates small farmers in new markets and provides a guaranteed additional source of income for them and their families;" Expands low-carbon path of development	Castor bean, a non-edible oilseed, was chosen as a 'smallholder-friendly' feedstock, as it grows on marginal soils and without external chemical "inputs – keeps farmers on marginal soils; Little impact on expanding options for farmers and diversify farming systems or options "	Incorporated individual subsistence farmers with little or no previous experience in cash-cropping to timely outputs; Complexity of the contracting process also noted; Contracted prices often below market prices	Mixed: Environmentally Positive/ Socially Negative
Brazil: Revision to PNPB in 2008/9	Added: Requirement that a representative social movement/ organisation sign the contract along with the smallholders to increase their bargaining power	Greater synergies with food security needs	Lowers food production by promoting mixed food-and-feedstock cultivation rather than feedstock monocultures	Need to build renewable energy supplies quickly whiel also giving time to farmers to learn and be active participants in new system; Balancing prices in terms of markets and also the need for a certain level of income to now meet food needs through other means	Mostly Positive: Smallholder involvement quadrupled (2008-2010) and feedstock purchased increased five-fold

Country	Model/Approach	Synergies	Tradeoffs	Conflicts	On Balance
India	Fuel ethanol programme building on an existing agro-industrial sector that already produced ethanol for purposes other than fuel. Linked to a 5 per cent blending mandate and a number of tax incentives to sugarcane mills. Jatropha as the main crop	"Theoretical synergies to rural development goals including income gains; Replaces 20 per cent of the country's" "total diesel consumption by 2012;" "Puts marginal lands to use and expands production capacity Feedstock cultivation linked to NREGA which guarantees 100 days of work per year for rural workers	Industry continues to capture all the value added and which now benefits from additional incentives and the opportunity to sell to a new market'. Resulting reduction of local food production (e.g. groundnut in the state of Tamil "Nadu);" Observed increased land-grabbing by government and the private sector	"Jatropha yields under suboptimal growing conditions seem highly overestimated; What official statistics designated" as 'marginal lands' were, in reality, often under some form of traditional use by rural populations, such as shifting cultivation, pastoralism or use for fuelwood and medicinal "plants;" Goal and modality – reduction in goal towards 20 per cent of total liquid fuel consumption with biofuels by 2017	Mixed: Environmentally Positive/ Socially Negative
Indonesia	Fuel ethanol mainly to create a captive biofuel market generated by the sugar cane and palm oil sectors. Linked to blending mandate as well as economic and regulatory incentives to engage private agribusiness	"Reduced fossil fuel use and reliance;" Create employment at feedstock plantations and establish "contract farming schemes between industry and smallholder farmers;" Guaranteed income and more regular income and lower labour costs for smallholder farmers	"Due to high start-up costs and the four year wait for palm to mature, most smallholders are involved through contract-farming; Nucleus farming scheme results often in 70/30 balance between private companies and smallholder farmers in terms of the production;" "Poverty and vulnerability seems to drive the bargaining between companies and smallholder farmers rather than market prices;" In Jambi Province, Sumatra) replaced rice cultivation (Indonesia's main staple crop), resulting in greater vulnerability to food price volatility	"Sugar cane sector has not bought in while palm oil sector has and the nature of the latter leads to patterns of land concentration as well as profit concentration in the hands of a few;" Intent vs application – here to Jatropha has not proved profitable resulting in investment losses for farmers due to limited yields and un-competitiveness.	Mixed: Environmentally Positive/ Socially Negative

Sources: BastosLima, 2013[1]; Perch 2010[2]; Zapata et al, 2010 [3].

Bastos-Lima, Mairon (2013). Adjusting Biofuel Policies to Meet Social and Rural Development Needs: Analysing the Experiences of Brazil, India and Indonesia. Policy Research Brief No. 40. International Policy Centre for Inclusive Growth. Brasilia. Available at: <http://www.ipc-undp.org/pub/IPCPolicyResearchBrief40.pdf>. Accessed January 28th, 2014.

Perch, Leisa, Stephanie Stahlberg and Carlos Potiara (2010). A Co-Benefits Approach to Sustainable Development: Strengthening Equality and Poverty Reduction through Climate Change, /([written by Leisa Perch with contributions from Stephanie Stahlberg and Carlos Potiara]. International Policy Centre for Inclusive Growth. Brasilia. Available at: <http://www.ipc-undp.org/pub/IPCWorkingPaper75.pdf>. Accessed January 28th, 2014.

Zapata, Clovis, Sara Brune and Jackline Adero (2010). Retrofitting the Brazilian Biodiesel Programme: Implications for Policy Design. Policy Research Brief No.15. International Policy Centre for Inclusive Growth. Brasilia. Available at: <http://www.ipc-undp.org/pub/IPCPolicyResearchBrief15.pdf>. Accessed January 28th, 2014.

bio-fuel crops and fuel production because of the continent's large amount of available land, abundant supply of labor, slowing rural development and growth and persistent rural poverty. Poverty rates in Africa remain persistently high, especially in rural areas where over 200 million people live on less than a dollar a day (World Bank, 2009: 3⁴⁸). Lack of employment opportunities are cited by the U.N. Economic Commission for Africa as being a significant impairment to poverty reduction in the region (UNECA, 2010⁴⁹). The importance of agriculture to the majority of the population living in poverty, as well as its significance to national economies in sub-Saharan Africa makes agriculture and agriculture-related industries central to poverty reduction and economic growth in the region (World Bank, 2009⁵⁰). Biofuels, theoretically, could help Africa address its energy, jobs and income woes and at the same time hit all the key green growth pillars.

But, the implied reforms to the energy system and shifts between economic drivers immediately create challenges given how the agriculture system currently works, placing considerable pressures on related eco-systems such as water resources and questioning how to balance food production with bioenergy in areas of significant food insecurity. Growing fuel to power urban lifestyles on arable land that could produce food for the more immediate population puts a clear interrogation mark on the social equity dimension of this green growth measure. If food wastage was reduced and food distributed more equally in the world perhaps allocating land to biofuel instead of food would not be as questionable. One

estimate by UNEP estimates that every year, consumers in rich countries waste almost as much food (222 million tonnes) as the entire net food production of sub-Saharan Africa (230 million tonnes)⁵¹. Apart from alarming, this fact highlights once again the close attention that needs to be paid to issues of equity in all dimensions ranging from consumption to production and benefits.

Notably global production of and investment in biofuel has increased while investment in agriculture has been declining and food price hikes and food security spikes have become commonplace. According to one assessment, global production of biofuel increased six-fold from 2000 to 2011 (REN21, 2012). Considering that the poor in developing countries spend between 50-80% of their income on food compared to 10% for American and European families this hardly seems fair⁵². FarmingFirst identifies thirty-six (36) active Food and nutritional security initiatives – more than 50% of which are global⁵³. Two of the more active countries in this transformation in biofuel are members of the BRICS – Brazil and India. Yet, analysis from the OECD⁵⁴ suggests that by 2030, almost half of the global population (3.9 billion) is expected to experience severe water scarcity, especially in the emerging BRIC countries and comparably more so than developed or other developing countries, raising the question: is this a viable trade-off even for BRIC countries?

⁴⁸ World Bank (2014). *Gender in Agriculture Sourcebook*. Washington, D.C.: World Bank, IFAD, and FAO, 2009. Accessed February 7th, 2014.

⁴⁹ United Nations Economic Commission for Africa (UNECA). *Economic Report on Africa 2010*. Addis Ababa, Ethiopia: Economic Commission and African Union, 2010. Accessed February 7th, 2014.

⁵⁰ See Footnote 48.

⁵¹ See <http://www.unep.org/wed/quickfacts/>. Accessed February 7th, 2014.

⁵² The Partnership for Maternal, Newborn and Child Health (2012). PMNCH Knowledge Summary #19 Food Security and Climate Change. Accessed from <http://www.who.int/pmnch/knowledge/publications/summaries/ks19/en/> on May 2nd, 2014.

⁵³ See <http://www.farmingfirst.org/food-nutrition-security-initiatives/>. Accessed February 12th, 2014.

⁵⁴ OECD (2013). OECD Environmental Outlook to 2030. Summary in English. Accessed from <http://www.oecd.org/environment/indicators-modelling-outlooks/40200582.pdf> on January 28th, 2014.

The evidence suggests that while some synergies have been achieved, other tradeoffs have not paid or been seen as acceptable by farmers who depend on land for their livelihoods. Farmers have been relegated the role of second class participants on the periphery of decision making on green shifts made mainly by governments and private sector who remain in a closed core where discussions are concentrated. It is quite likely that a more dispersed model, rather than a core-periphery model of innovation for green transformations, would yield higher outputs on the social equity agenda. Why are we not listening and learning from green innovations already happening at the local level that could have potential for scaling up?

Naturally, in managing contradictions and complexities between rich and poor and between people and nature, conflict arises. One review by Bastos Lima (2013) that analyzes Brazil, India and Indonesia is quite critical particularly on the social benefit spectrum and suggests that while consensus may exist on green energy value of biofuels, farmers and others have questions on the 'development value' of current models. In India, some farmers ended up boycotting the programme and even sabotaging some of the plantations (see Table 1).

Other challenges include the gender unequal nature of biofuel opportunities as other research suggests (Rossi and Lambrou, 2008; Schut et al, 2010).^{55,56} To-date, the significantly gendered dimensions of agriculture,

particularly in Sub-Saharan Africa, have not been fully recognized by prevailing bio-fuel models. While theoretically, rural women stand to gain significantly from biofuel through improved health, income earning opportunities and economic security and access to renewable energy, results so far do not suggest that these were prioritized in planning or implementation.

Moreover, in the case of Mozambique, they actually limited the advancement on women's land tenure rights. A lack of policy coherence between bio-fuel and land policy and land use policy and gender equality; and the lack of consistency between the traditional macro-economic bio-fuel model and the micro-based economic challenges faced by those targeted for both productive and social inclusion limited gender equity outcomes⁵⁷. Those limitations can prove costly or development in general with the multiplier effect of gender on environmental sustainability proven.⁵⁸

Other key lessons learnt from the experiences of Brazil, India and Indonesia include the failure to (i) address the balance of power which often remains in the hands of the private sector and indeed government with little attention to greater empowerment of the smallholder whose involvement is supposed to generate the jobs and poverty reduction gains needed and (ii) address the balance between profit and development by relying on pricing incentives mostly to engage a more protagonist private sector. When the latter has been addressed

⁵⁵ Rossi, Andrea. and Yianna Lambrou (2008). Gender Equity Issues in Liquid Biofuels Production: Minimizing the Risks to Maximize the Opportunities. Rome: Food and Agriculture Organization of the United Nations. Accessed from <ftp://ftp.fao.org/docrep/fao/010/ai503e/ai503e00.pdf> on January 28th, 2014.

⁵⁶ Schut, Marc, Sandra Bos, Lara Machuama, and Maja Slingerland (2010). Working Towards Sustainability: Learning experiences for sustainable biofuel strategies in Mozambique. Wageningen University Research Centre. Accessed on November 1, 2012.

⁵⁷ Perch, Leisa, Clare Watson and Bridget Barry (2012). Resource inequality: Moving inequalities from the periphery to the centre of the post-2015 agenda. Accepted under the "Addressing Inequalities" Global Thematic Consultation - Call for Proposals for Background Papers, Oct 2012. Available at: <http://www.worldwewant2015.org/pt-br/node/287354>.

⁵⁸ Habtezion, Zerisenay (2011). Gender and Energy Policy. Global Gender and Climate Alliance. Policy Brief No. 3. Accessed from <http://www.beta.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/Gender%20and%20Energy%20Policy%20Brief%203%20Final.pdf> on January 28th, 2014.

more directly in the case of Brazil, through a partnership with a quasi-government entity (Petrobras) and by prioritizing social benefits, better overall outcomes were observed including the growth of the programme itself (see Table 1).

One clear need which emerges from these examples is to “ground” green power arguments in the other structural realities which drive its production and distribution. An opportunity exists, now, to re-think the social equity and environmental sustainability intersections that lie at the core of sustainable development, demanding special attention to the effectiveness of new models as well as their efficiencies. It suggests that not only does green policy need a stronger social lens but that social policy itself also needs to be more pro-active in green policy efforts.

V. Conclusion: Making Green Growth a People-Centered Triple Win

This paper has examined the main underpinnings of the green growth model in order to provide an introspective on its coherence with social justice and equity considerations found in recent commitments to sustainable development. It assesses the extent to which the overall approach and assumptions inherent in the green growth model are consistent with social sustainability, one of a growing number of papers to explicitly look at this connection. It initiates a necessary investigation of whether and how these assumptions allow or inhibit green growth from adequately addressing well-documented social sustainability underpinnings of sustainable development e.g. multi-dimensional poverty, inequality and social justice. In so doing, the potential for green growth to deliver in important ways for poor and marginalized people has been assessed, at least as much as a literature review can.

While the green growth and the green economy was a major part of the discussions at the Rio+20 conference, given its predominant

focus on the economy and the environment it is best placed to sit within the sustainable development agenda rather than as a discourse and paradigm of its own.

As the Future We Want Outcome Document clearly reaffirmed the inextricable link between social, economic and environmental policies for the achievement of sustainable development and human well-being and sustainable development, in its integrated form, has been heralded by the UN as the global guiding principle and operational standard necessary to ensure social justice and dignity for all⁵⁹.

While the importance and merit of the principles of equitable and sustainable development are difficult to dispute and easy to sign up to, ensuring that: (a) economic activities continue to be productive without undermining the people and natural resource base upon which they depend; (b) the benefits of economic growth are distributed more equally among societies and are used to finance the transition to a lower carbon footprint; (c) the basic principles of human rights and social justice are enforced and; (d) that countries do not view sustainable development as a restrictive model of development but rather a valuable opportunity to do things differently will require deeply transformative changes if the world wishes to transit from good intentions to action and if green growth is to realize inclusive growth outcomes as well as green ones.

There is no doubt that the world is confronted with several intersecting challenges related to growth and development as well as the realization that our current pattern has in effect created several crises of environmental

⁵⁹ United Nations (2013). A life of dignity for all: accelerating progress towards the Millennium Development Goals and advancing the United Nations development agenda beyond 2015. Report of the Secretary General to the Sixty-eighth session of the General Assembly, July 2013. Accessed from <http://www.un.org/millenniumgoals/pdf/A%20Life%20of%20Dignity%20for%20All.pdf> on February 25th, 2014.

degradation, poverty and inequality. Green growth has emerged as one response to the need to balance economic growth with greener production and consumption approaches and patterns while reducing the burden of negative externalities on nature. However the deep rooted social, and to some degree environmental questions of our times are left unanswered by a paradigm that continues to be rooted in the lopsided motivations and unequal structures of traditional economic models that benefit the few and do little to quell the demands for equity and justice of those who have been consistently excluded.

Without due attention, the current green economy formula could replicate some of the ills of the traditional economic model, even as the mode of transmission differs. While it may reduce traditional tensions between environment and economics, it could plausibly exacerbate others for example when environmental risks and costs may be reduced in the bio-physical sense but not in a socio-physical or socio-economic sense. It could also reinforce the hegemony of quantity over quality as an effective measure of development progress. Often quoted figures of the millions who are now part of a new energy revolution often do not clarify to what extent the previously excluded make up of these numbers i.e. how many true new users make up this number and how exactly are they better off.

In order to really make a shift to so called people-centred sustainable development triple wins, the world will need to rethink what it means by growth and by development and use this to shape a discourse and direct policies and practices. With its disproportionate emphasis on technology as the magic bullet for shifting from unsustainable to sustainable growth, the green growth paradigm provides small-and medium sized -answers to big fundamental problems. In stressing for example that we can 'deal' with climate change and environmental degradation by adopting energy efficiency and green technologies it

overlooks the need for redistributing economic and ecological space in more equitable ways and sends the message that we will all benefit from the economic growth yielded by green technologies and new businesses without having to adopt big changes⁶⁰.

In vast parts of rural India and rural Africa and other regions, poverty is more about the lack of access to natural resources than it is about the lack of financial resources. So how are people who depend on nature for their subsistence going to benefit from a model that prioritizes money and growth, most of which is likely to be concentrated in the hands of big business, governments and the wealthy living in urban centres?

As the green growth locomotive continues to gain momentum as a pragmatic approach to greening our world, it will be fundamental to continue to question how a green transformation can be made relevant to the world's excluded, poor and possibly even new middle classes so we can help redirect the locomotive before it bulldozes over the very people it should be helping.

⁶⁰ Narain, Sunita (2008). Why environment needs equity: Learning from the environmentalism of the poor to build our common future. 12th K R Narayanan Oration. Centre for Science and Environment. Accessed from <http://www.cseindia.org/userfiles/Narayanan%20Oration.pdf> on February 25th, 2014.

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